Boston City Planning Board

NORTH END WATERFRONT PROPOSAL

Preliminary Draft May 1956

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A Preliminary Report

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May 1956

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Rediscovered Waterfront

Boston's downtown waterfront was once the center of the city's business and commercial life. Its wharves were a forest of masts and prosperous warehouses and mercantile establishments crowded the shore area.

But as port facilities spread down the harbor and business moved uptown, the old waterfront began to decline. Some wharves burned and were not replaced. Others fell into disrepair. More and more waterside buildings became vacant. And the whole area developed a shabby, neglected air.

Now the city is taking a second look at the waterfront. Badly overcrowded and with no place to expand, Boston is at last beginning to realize the value of space it has so long misused.

The City Planning Board has just placed before the Mayor an admirably imaginative plan for the redevelopment of the waterfront from Northern Avenue to Commercial Street, a three-quarter mile stretch covering most of the historic wharf area. The plan calls for the elimination of most of the present buildings there and the erection of modern facilities, including a park, a museum, a marina (parking place for small boats), new piers, ship service establishments, and a heliport.

In such an ambitious project there are bound to be details which don't please everyone. The location of the heliport, for example, is open to debate. There is also a question whether certain landmarks, such as T wharf, should be preserved and restored or sacrificed to the new plan. But the overall conception is both attractive and sound. We should definitely go ahead with it.

Can we afford it? The answer is we can't afford to turn it down. The Planning Board estimates the overall cost at between $10,000,000 and $13,000,000. But all of it except the park would eventually pay for itself. The project might be undertaken, as the Mayor has suggested, under the Urban Redevelopment Program. It might even better come under the new Port Authority.

The point is that waterfront redevelopment is not a luxury project for the city. It is a necessary step in the larger fight against urban decay. We must undertake this sort of long-range building not only on the waterfront but in various parts of the city in order to start values rising again.

The waterfront plan is part and parcel of the General Plan promulgated by the Board five years ago. It is a good place to get the General Plan started. The Central Artery, which swings down to Atlantic Avenue at this point, is already creating all sorts of new potentials for the downtown area. If the city plans intelligently it can control the kind of building which springs up around the artery. It can maximize the benefit of the highway or throw away another golden opportunity.

The waterfront project should enhance the value of a large area around it. The Planning Board is doubtless already eyeing the shore front to the north and the blocks on either side of the artery going toward North Station. It will be disappointing if the City government and the business community fail to rise to this leadership.

More than the waterfront is at stake now. This project may well be the test of Boston's capacity to rebuild anywhere any time. It is an opportunity we no longer dare ignore.

Introductory Note

Upon the completion of the Preliminary General Plan for Boston, released in 1951, it was the decision of the Board that, as part of its program, the staff should proceed with the refinement of these preliminary proposals by initiating a series of area studies which would address themselves to each of the major sections of the city in turn. The Central Area Study was the first of these to be undertaken. The principal subject areas in this case have been the downtown business district and the four in-town residential sections - North End, Beacon Hill, Back Bay, and South End. Proposals for these component areas, as refinements of the Preliminary General Plan, are to be forthcoming during the remainder of 1956 and early 1957.

Within this context, the accompanying proposals for the section of the North End waterfront identified by Figure A may be said to come as a product of the Central Area Study. Actually, this waterfront area represents something of a special case, for it is set apart from both the downtown business district and the residential North End itself. Neither its present problems nor its potential is representative of business district or residential area conditions or prospects. Since this proposal is being released before the main body of plans for the Central Area, it should therefore be said more accurately that this is to be taken as the first of a series of special studies through which relatively specific proposals are to be forthcoming for selected sections of the Central Area where the need for change is especially urgent. Not all of the Area is to be dealt with in comparable detail. As a matter of fact, the more comprehensive plans for the downtown business district and residential sections are to be expressed in significantly more generalized terms.

Although developed in some detail, this waterfront proposal is still to be understood as being but an initial statement of an idea. Reception of the idea to date has been generally favorable and encouraging. Allowance must nevertheless be made for the fact that the proposal is subject to change and improvement as discussions are initiated looking toward the implementation of the plan. With this precautionary note, the Planning Board authorizes the release of this report as a staff study in order that there may be a more general understanding of the problem, and with the further hope that it may serve in arriving at a constructive solution.

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NORTH END WATERFRONT PROPOSAL

Principal problems and plan objectives

There is little about this waterfront area in its present state of development which suggests its real potential. Of necessity, therefore, the proposals following will address themselves especially to new uses and facilities which may be visualized and recommended for this area. Nevertheless, a brief review of the area's more significant present problems may still be in order as one of the preliminaries:

a. With few exceptions, the physical plant presents a dreary picture of obsolescence, neglect, and vulnerability to fire.

There are only two fireproof structures of any consequence in the entire area from the MTA power station south to the Appraisers' Stores Building at Northern Avenue. Add to this the fact that much of the pier-work itself is in an advanced state of rot, and we have a situation which is little short of being an emergency case.

b. Location of activities within the area has been generally haphazard, and continued operation a wasteful (as well as hazardous) expedient.

Once the center of Boston's waterborne commerce, this area has for the most part long since fallen heir to a miscellany of warehousing and light industrial activities which depend little upon shipping access. For these, the problem has been one of adapting out-moded piers and commercial structures to meet present-day processing and goods-handling requirements, with heavy reliance upon shipment by truck. Little demonstration is required to show that this adaptation has been something less than successful. Meanwhile, this significant section of Boston's waterfront is lost as a site for waterfront activities of any consequence.

In substance, then, the area is beset with an accumulation of problems, and there is little evidence of any interest in, or capacity for, effectively solving these problems through a process of self-regeneration arising from within the area itself. Both of these conditions strongly suggest that new goals must be set for the area, and an overall development program undertaken, if this area is to become once again an asset to Boston, as city and as port. The following proposals are intended as a beginning in that direction.

These proposals take two forms. First, they identify those basic waterfront functions which are thought to represent this area's highest inherent potential, and which, at the same time, would appear to be most consistent with prospects for contiguous areas inland. Second, they take the form of a proposed physical layout representing an arrangement of key facilities which would appear to offer the most effective accommodation for the area's potential.

Area delineation and context

The problem area extends outward from Atlantic Avenue to the U. S. Pierhead Line, with a line just below the MTA power station being the northern limit, and with the U. S. Appraisers' Stores Building being the limit to the south (see Figure A). The selection of these limits was governed by the following considerations:

a. Despite the fact that the Central Artery has already begun to take over much of its thru traffic, Atlantic Avenue may be expected to continue as a heavy-duty thoroughfare, and hence must be assumed as "given" (with improvements) in any major street scheme for this section of the Central Area. It will continue to provide the principal means of vehicular access to this area, and will accordingly form a suitable project boundary.

b. The U. S. Pierhead Line must be accepted as the practicable limit on the channel side because it serves as the bulkhead line as well: neither fill nor pier construction is permitted beyond this limit.

c. The MTA power station establishes the practicable limit to the north for, as the principal source of power for the entire MTA system, it is one of the key utilities in the entire metropolitan area, and the cost of immediate replacement would be prohibitive. A further limiting circumstance in this sector is the U. S. Coast Guard base, which is by now deeply committed to its present location, even though reportedly crowded for space in some respects.

d. Actually, the effective limit to the south, for waterfront development purposes, is a few hundred feet north of the Appraisers' Store Building, primarily because of present uncertainties about the profile and eventual use of the new (and adjoining) land which would be created at the entrance to Fort Point Channel when this filling operation is actually carried thru. (Were this new land thought to be a likely spot for a heliport, however, as it is assumed for the purpose of this report, much of the present filled area below Rowe's Wharf would presumably be required as an adjunct.)

Proposed functions and components

The fundamental objective of an effective development program for this area would be that of realizing the area's potential as waterfront. With this as the objective, what are the alternatives? Of the basic types of waterfront uses, which would represent the best potential for this area?

In a word, the choice is between (a) ship services, (b) public use, or (c) some combination of the two. Of these alternatives, the third is accepted as being the most realistic. At the same time, this area is seen as being particularly suitable for public use. The following review of proposed components is governed accordingly.

Predominantly public use of this waterfront area is proposed primarily because of its location. Even now, this is the section of the harborfront which is most easily reached by the greatest number of people, both by car and by MTA. And with the completion of the Central Artery, this will be truer still. Most strongly recommended, therefore, are these two facilities for public use:

a. A waterfront park with historic associations, designed to make the most of the commanding view of the harbor afforded from this area; and

b. A prominent excursion wharf, which would afford an attractive setting for a selection of waterfront shops and restaurants, as well as ample terminal facilities for excursion boats, and tie-up space for smaller craft.

For the use of the boating public, a marina is also recommended as an appropriate facility for this area. Intended primarily as an organized and protected tie-up area for small craft using this section of the harbor as a base of operations, this facility may also be expected to serve as a significant point of arrival and short-term lay-over for visiting craft.

Promising as this location seems to be for these public and quasi-public facilities, this area offers distinct advantages, at the same time, to the ship services group (chandlers, marine supply houses, small-scale marine repair shops, tug boat companies, etc.). With this area as their base of operations, they would enjoy (as those in this area do now) ready access to the entire harbor from a relatively central location. It is, therefore, recommended, finally, that a section of this area be set aside for an assortment of these establishments.

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Proposed arrangement of facilities

Further than recommending that a park, an excursion wharf, a ship services section, and a marina should be provided within this area, it is being proposed as well that the most effective arrangement of these facilities would be along lines suggested by Figure B.

As proposed by this scheme, the 15-acre park would be situated in the northern section of the area, adjacent to residential North End; the ship services facilities would be provided for in the section below State Street and the excursion wharf (as Long Wharf extended) and marina would occupy the mid-section.

The key to this proposed arrangement is the apparent superiority of the northern location for the park. A park located adjacent to or south of State Street would have the advantage of being closer to an MTA station (at State Street), and would be more convenient for noon-time use by employees of the nearby high-density office area. And, so situated, such a park would, as a metropolitan facility, be more free of possible identification with a single residential area. Despite these possible advantages, however, a park in the southern section of this area would be seriously restricted in both size and form, and would offer too little in identity, or as environment, to justify the investment. By contrast, a park as shown in Figure B, though somewhat less convenient to the MTA station, and the downtown area, could be sufficiently ample to create an atmosphere of its own, and could command an impressive view of the entire harbor. At the same time, the creation of a park in the northern section of this waterfront area would contribute much toward encouraging the renewal of residential North End itself.

The excursion wharf and marina are proposed for that section of the area where the distance out from Atlantic Avenue to the pierhead line is the greatest, and where the relative absence of existing bulkhead would afford the greatest liberty of movement for boat traffic within the protected dock area. (See Figure C.) It is also to be said that the excursion wharf itself would be most efficiently situated at State Street, with its MTA station and nearby parking garages, existing and prospective.

* * *

The proposed arrangement also reserves a site for a heliport at the mouth of Fort Point Channel, the recommendation being that this facility should be created at the same time that the Channel itself is filled. A heliport at this point would be not only most convenient to the downtown business district, but would constitute an efficient adjunct to the Northern Avenue passenger terminal development being advanced by the Port Authority.

A close-up

As specified at the outset, this proposal is intended primarily (a) to identify functions and facilities thought to represent this area's highest potential as waterfront, and (b) to suggest how these facilities might be most effectively arranged within this area. The essentials of this proposal are covered in the previous sections. By contrast, this closer look into sections of the preferred scheme is somewhat more conjectural. It may, nevertheless, serve to assist in visualizing some of the more concrete details implied by the larger layout concepts.

It would be fitting for the park to have historic associations at the same time that it accommodated year-round leisure-time activities appropriate to this waterfront setting. Hence the special proposals that a maritime museum be situated here, and that the U. S. Constitution be berthed nearby. It is also significant that a park located as proposed could be tied in readily with key historic sites inland.

It has already been proposed that the excursion wharf should be designed as an attractive setting for a selection of waterfront shops and restaurants, besides providing appropriate terminal facilities and tie-up space for excursion boats and smaller craft. A workable arrangement of these accommodations (as re-use possibilities for the retained Commercial Wharf bulkhead, as well as for Long Wharf extended) is illustrated by Figure B. As shown, provision has been made for between 100,000 and 200,000 sq. ft. of structural floor space, depending upon the extent to which the structures themselves are single-story or 2-story. In addition, space for between 200 and 300 cars has been allocated for short-term parking. (It is assumed that much of the long-term parking, by excursion boat passengers and boating enthusiasts, would be accommodated in garages inland from Atlantic Avenue.) The marina itself could provide berth space for between 150 and 200 small craft at peak capacity.

Facilities for the ship services section would be primarily for dock-side storage, processing and repair operations, although some retail frontage along Atlantic Avenue may be desirable, and perhaps a small office building. Tentative layout included in Figure B represents approximately 200,000 sq. ft. for storage and processing, and an additional 50,000 sq. ft. for retail frontage - assuming single-story throughout. A six-story office building, as shown, would provide an additional 140,000 sq. ft. Water area inside the pierhead line should probably be reserved primarily for boat movement to and from the individual sidings or covered slips, although there would be room as well for a limited amount of tie-up space as such (for tugs, fishing boats, etc.).

[illegible]

[illegible]

[illegible]

[illegible]

Approximate costs, and general development procedure

Tentative estimate is that preparation of this area for a development along the lines proposed by Figure B would cost between $9.6 and $13 million. This is approximately what would be required for acquisition (assuming payments of between 125 percent and 175 percent of present assessed valuation), clearance of piers and structures, and construction of new piers and bulkhead. The big item is acquisition, which would alone account for two-thirds of this total. Cost of actual new piers, new bulkhead and fill, would come to about one-fourth of the total, or between $2 and $3.4 million. Clearance would require another $1 million-plus. (See Table 1.)

The park itself (exclusive of the museum, and before landscaping) would cost between $3 and $3.8 million, over two-thirds of this for acquisition alone. Actual cost of fill and new bulkhead would be little more than $600,000. Considering the benefits to be derived, this would appear to be a modest investment indeed.

Most expensive of the three sections to prepare for re-use would be that recommended for the excursion wharf and marina. Here, it is estimated that the total cost would be $3.8 to $5.4 million, three-fourths of this for acquisition. Cost of new fill and pier construction would come to between $500,000 to $1 million.

Preparation of the ship services section for re-use would cost between $3 and $4 million, with the cost of acquisition accounting for about 45 percent of this total. New piers, fill, and bulkhead would cost an estimated $1 to $1.7 million.

Not all of this $10-$13 million program need be undertaken at once. Indeed, it would probably be desirable to proceed in stages, perhaps with the reconstruction of the ship services section at an early stage to facilitate clearance and reconstruction of the excursion wharf section, and the creation of the base for the park. In any case, it is assumed that the Quincy structures on T Wharf may have to be retained for some time. (Retention of these structures alone would reduce the immediate cost of the total program by at least $2 million.)

Approximate costs, and general design of a reactor

[illegible]

This anticipation of approximate costs assumes that a public agency would be responsible for carrying out this development program. The cost figures themselves have, therefore, been restricted to operations corresponding to those performed by the Boston Housing Authority (Redevelopment Division) in preparing a site for re-use by private developers. At the same time, it is being assumed that the Port of Boston Authority is the most likely candidate for the job, and for this agency the creation of sites for private development may represent a departure from current practice. It is nevertheless submitted that structures which would house the shops, restaurants, marine suppliers, et al, in the excursion wharf and ship services sections should be built privately. The investment which these would represent has, therefore, not been included within the above estimated development costs.

It may be anticipated, furthemore, that the base for the park, once prepared, would probably be transferred at cost to a park agency which would be more appropriately responsible for such a public (and historic) area. With this transfer, the cost of the total program to the Port Authority would be brought down to between $6.6 and $9.4 million (or about $4.6 and $6.5 million so long as the Quincy structures on T Wharf are retained). The feasibility of an outlay of such proportions is discussed in the following section.

Income Prospects

The section immediately preceding includes preliminary estimates of the outlay which would be required to prepare this area for its new and more appropriate roles. It remains now to anticipate wherein a development along the lines proposed may be expected to become a source of income to the developer, and to the city. (See also Table 2.)

a. The prospect for the city is that the total annual tax return from this area as redeveloped along lines suggested by Figure B may be expected to exceed the return for 1955 by 25 percent, or about $80,000.

i. It is estimated that the new structures designated for the excursion wharf and ship services section would represent an investment of between $5.7 and $6.8 million, or approximately $6,250,000.

ii. Assuming that their assessed value would be 75 percent of construction costs, these new structures (plus the Quincy structures retained) would bring the total taxable value in the area up to approximately $6,000,000, or 25 percent more than the total in 1955. Total tax return may be expected to increase proportionately.

[illegible]

b. The prospect for the developing authority is that annual debt charges may exceed expected ground rents received by as much as $64,000.

i. As derived in the previous section, it is estimated that minimum net cost to the developing authority would fall somewhere between $4.6 and $6.5 million, or approximately $5.5 million.

ii. Assuming a 40-year amortization period at 2 percent, annual debt charges to the developing authority on an initial outlay of $5.5 million would come to approximately $194,000.

iii. From a layout as suggested by Figure B, the developing authority could expect to receive approximately $130,000 in ground rents annually, assuming that these rents would average at least $.20 per sq. ft. (This corresponds to a purchase price of $2.50 per sq. ft. which is not unreasonable for this area. Assessed valuation of land averaged only $1.20 per sq. ft. in 1955, exclusive of American Sugar holdings. It is to be noted, however, that valuation in this area has been declining steadily for decades: in 1938, for example, land hare was assessed at $2.20 per sq. ft.; in 1926, the average was $3.50.)

Set off against each other, these two prospects suggest that, with the exception of the park, the development being proposed would appear to have a good chance of doing better than breaking even. For, if necessary, the entire annual deficit of the developing authority would be more than covered by increased tax return to the city: according to the conditions assumed for this analysis, the city would meet this deficit and still be receiving $16,000 more in taxes from this area than it did in 1955. Needless to say, the net cash gain to the city would be greater if the developing authority can hold down its deficit by receiving ground rents averaging more than $.20 per sq. ft., or by applying other sources of revenue to debt retirement (eg, parking fees, or fees from the use of the marina).

The foregoing is not intended, however, to suggest that the proposal is being submitted purely as a revenue-producing scheme. As a matter of fact, the fundamental purpose has been that of suggesting improvements which appear to represent the use potential inherent in this area's geographic setting. It can apparently be demonstrated that these proposals would, with the obvious exception of the park, be self-liquidating as public investments, and would be within reach of the required private investment. At the same time, this potential development is to be reviewed as a resource to the city in other respects as well - as point of attraction, for example, and as stimulus to the renewal of the residential and business district areas in the immediate environs and adjacent to the Central Artery.

[illegible]

TABLE I

North End Waterfront Proposal: Estimated Cost of Preparing Site for Re-Use

(in thousands of dollars)

	Total Cost		Cost of Acquisition (a)		Cost of Clearance (b)	Cost of Site Preparation (c)	
	Min	Max	Min	Max		Min	Max
Gross Cost	9,560	13,150	6,160	8,580	1,220	2,180	3,350
Park	3,000	3,750	1,960	2,700	410	630	640
Excursion Wharf (d)	3,750	5,420	2,910	4,070	340	500	1,010
Ship Services Section	2,810	3,980	1,290	1,810	470	1,050	1,700
Net Cost to Developer							
Gross Cost	9,560	13,150	6,160	8,580	1,220	2,180	3,350
Less: Park (e)	3,000	3,750	1,960	2,700	410	630	640
Sub	6,560	9,400	4,200	5,880	810	1,550	2,710
Less: Quincy (f)	1,960	2,920	1,560	2,190	70	330	660
Net Cost	4,600	6,480	2,640	3,690	740	1,220	2,050

(a) Minimum @ 125 percent of 1955 assessed valuation; maximum @ 175 percent.

(b) Removal of decks and piling @ $2/sq. ft.; removal of structures @ $.21/sq.ft.

(c) New bulkhead and fill, where necessary, @ $150/running foot and $1/cu.yd., respectively; new timber piers @ $5 to $10/sq. ft.

(d) Including estimated cost of acquiring and removing Quincy structures on T Wharf.

(e) Assumed to be sold at cost to park developer.

(f) It is assumed that the Quincy structures on T Wharf may have to be retained for some time.

TABLE 2

North End Waterfront Proposal: Present and Anticipated Public Income from Area

(in thousands of dollars)

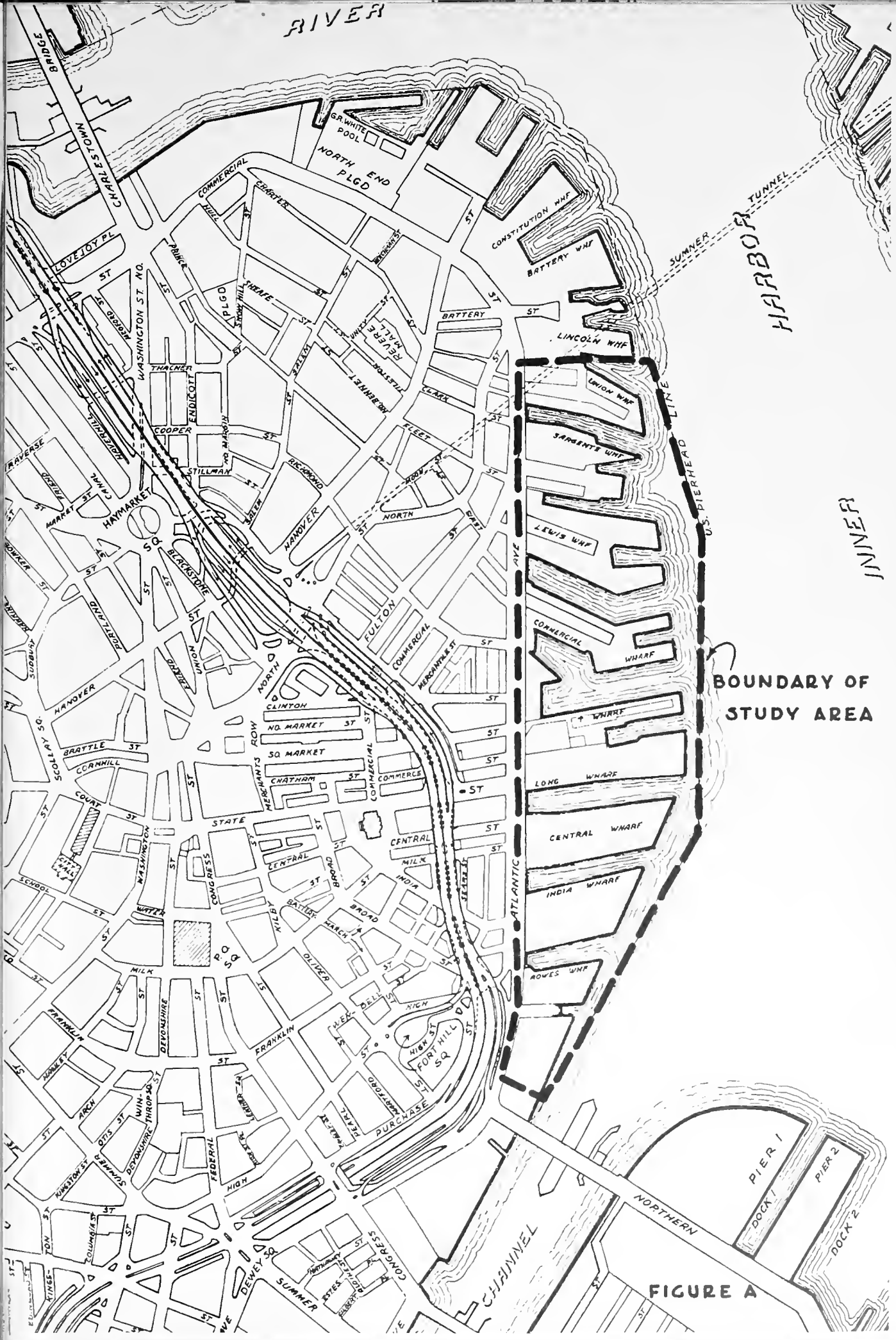
	Existing (1955)			Anticipated After Development			Increased Tax Return
	Total	Quincy	Remainder	Total	Quincy	Remainder	
Income to City							
Assessed Valuation	4,800	1,250	3,550	5,950	1,250	4,700 (a)	
Total Annual Return (b)	336	87	249	416	87	329	80
Income to Developer							
Annual Debt Charge (c)						194	
Total Anticipated Ground Rent (d)						130	
Special Annual Assessment on City						64	(-64)
Net Increase in Tax Return to City							16

(a) 75 percent of an anticipated investment of 6,250,000 (360,000 sq. ft. of low-rise @ $10 to $12/sq. ft., plus 140,000 sq. ft. office bldg. @ $15 to $18/sq. ft.)

(b) $70 tax rate employed throughout.

(c) Required to amortize an initial capital outlay of $5,500,000 over a 40-year period @ 2%.

(d) 650,000 sq. ft. of rentable groundspace @ $.20/sq. ft. per year.


RIVER
INNER
HARBOR
CHARLESTOWN BRIDGE
G.R. WHITE POOL
NORTH END PLGD
CONSTITUTION WHF
BATTERY WHF
SUMNER TUNNEL
LINCOLN WHF
UNION WHF
SARGENT'S WHF
LEWIS WHF
COMMERCIAL WHARF
WHARF
LONG WHARF
CENTRAL WHARF
INDIA WHARF
ROWES WHF
U.S. PIERHEAD LINE
BOUNDARY OF STUDY AREA
ATLANTIC AVE
CHANNEL
NORTHERN
PIER 1
PIER 2
DOCK 1
DOCK 2
FORT HILL SQ
DEWEY SQ
HAYMARKET SQ
P.O. SQ
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BLACKSTONE
FULTON
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FIGURE A

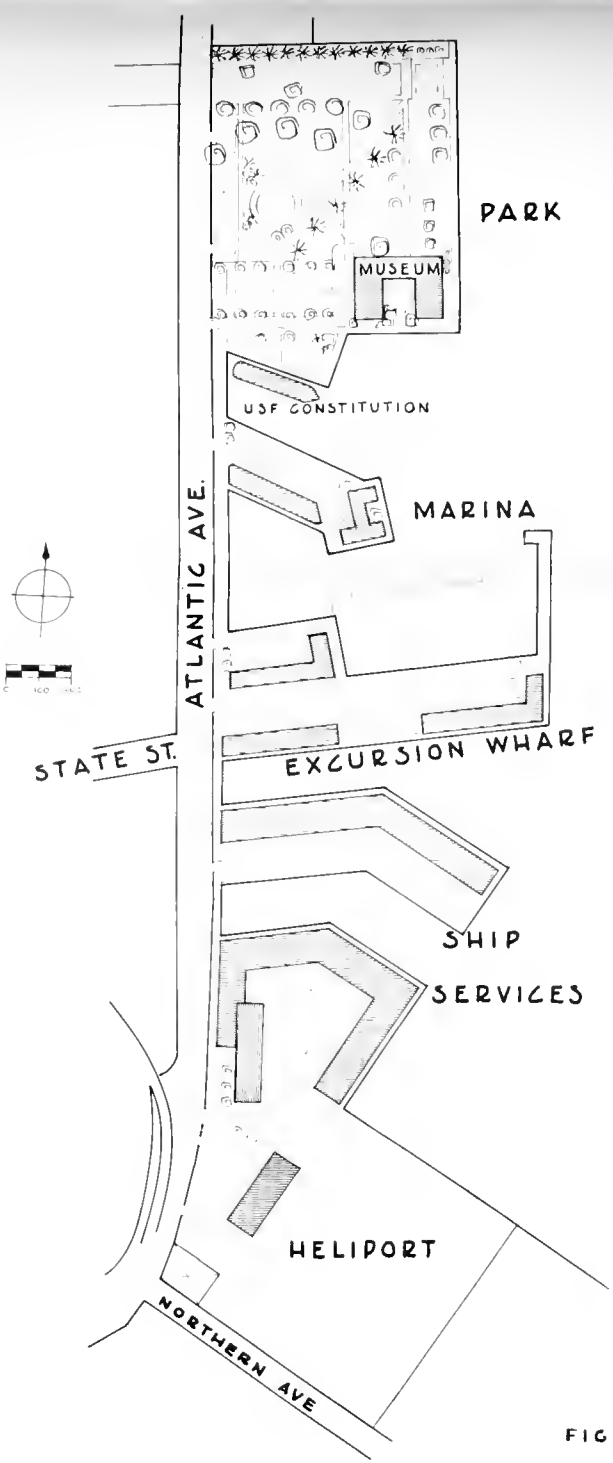
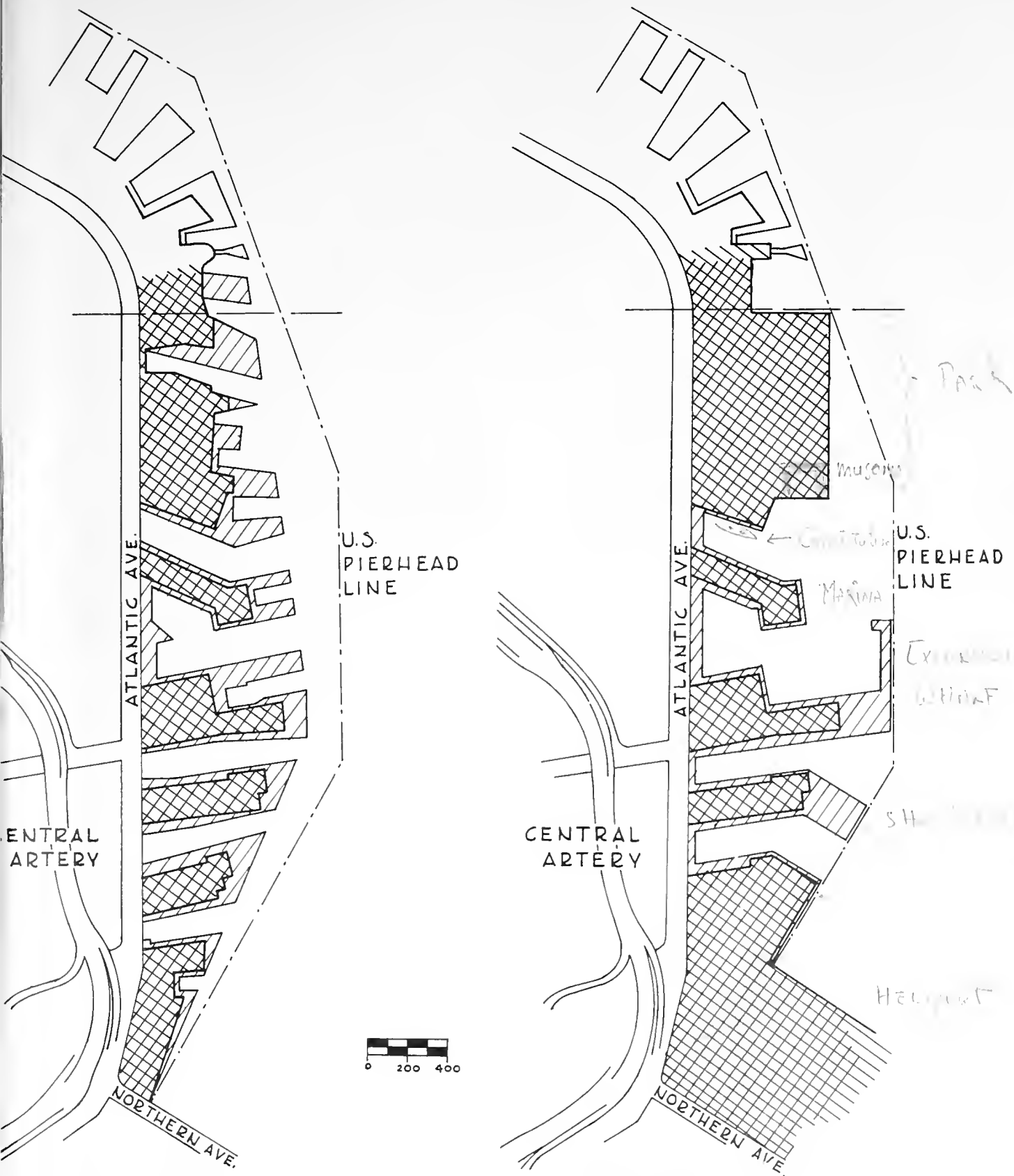


FIGURE B

NORTH END WATERFRONT STUDY

BOSTON CITY PLANNING BOARD



EXISTING PROFILE

PROPOSED PROFILE

PIER AND BULKHEAD LINES

SOLID FILL

WHARVES

FIGURE C